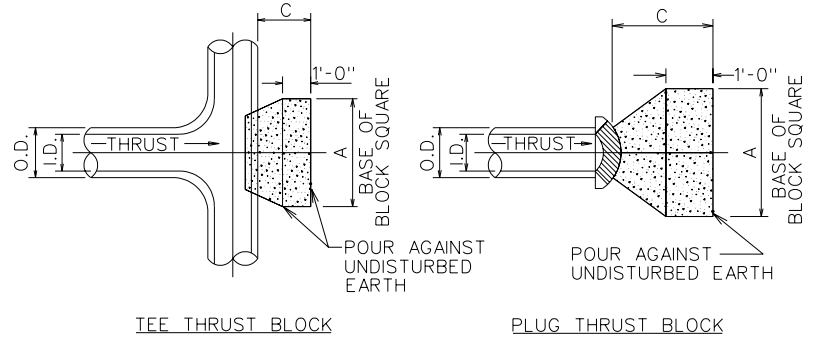


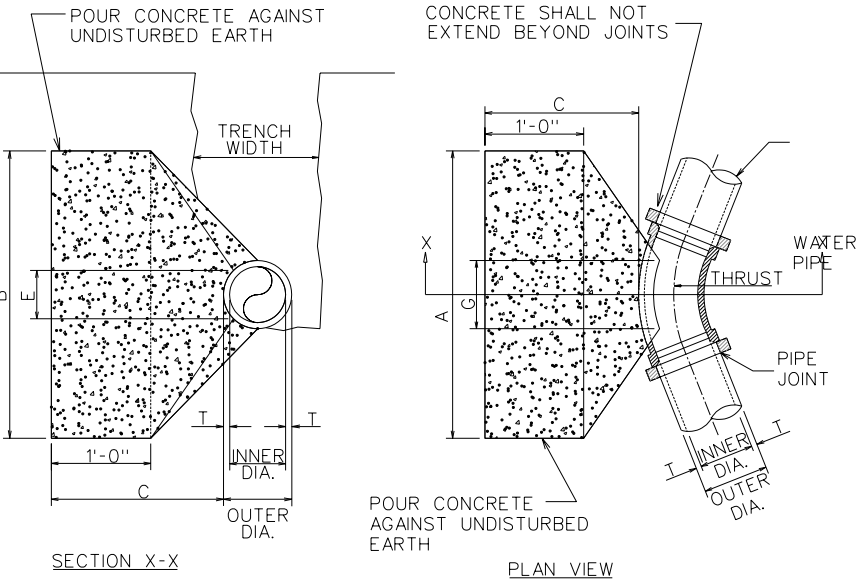
NOTE: USE POLYETHYLENE WRAP OR  
EQUAL BETWEEN CONCRETE & PLUG  
TO PREVENT CONCRETE FROM  
STICKING TO PLUG.

TEE AND PLUG SCHEDULE					
ID (in)	THRUST (tons)	C (ft)	A (ft)	VOLUME (c.y.)	
4,6,8	5.1	1.5	2.5	0.3	
10,12	11.3	1.5	3.5	0.6	



- THRUST BLOCK NOTES:
1. ALL CALCULATIONS ARE BASED ON INTERNAL PRESSURE OF 200psi FOR 24" AND SMALLER INNER DIAMETER PIPE.
  2. ALL BEARING SURFACES OF THRUST BLOCKS SHALL BE PLACED AGAINST UNDISTURBED EARTH OR ROCK.
  3. CONCRETE FOR BLOCKING SHALL BE 2000 psi.
  4. DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD WHERE AND AS DIRECTED BY THE ENGINEER. THE VOLUME OF CONCRETE BLOCKING SHALL NOT BE LESS THAN SHOWN HERE.
  5. WATER MAIN WILL NOT BE FILLED UNTIL ALL CONCRETE BLOCKING HAS REACHED 1500psi.

THRUST BLOCK DETAILS

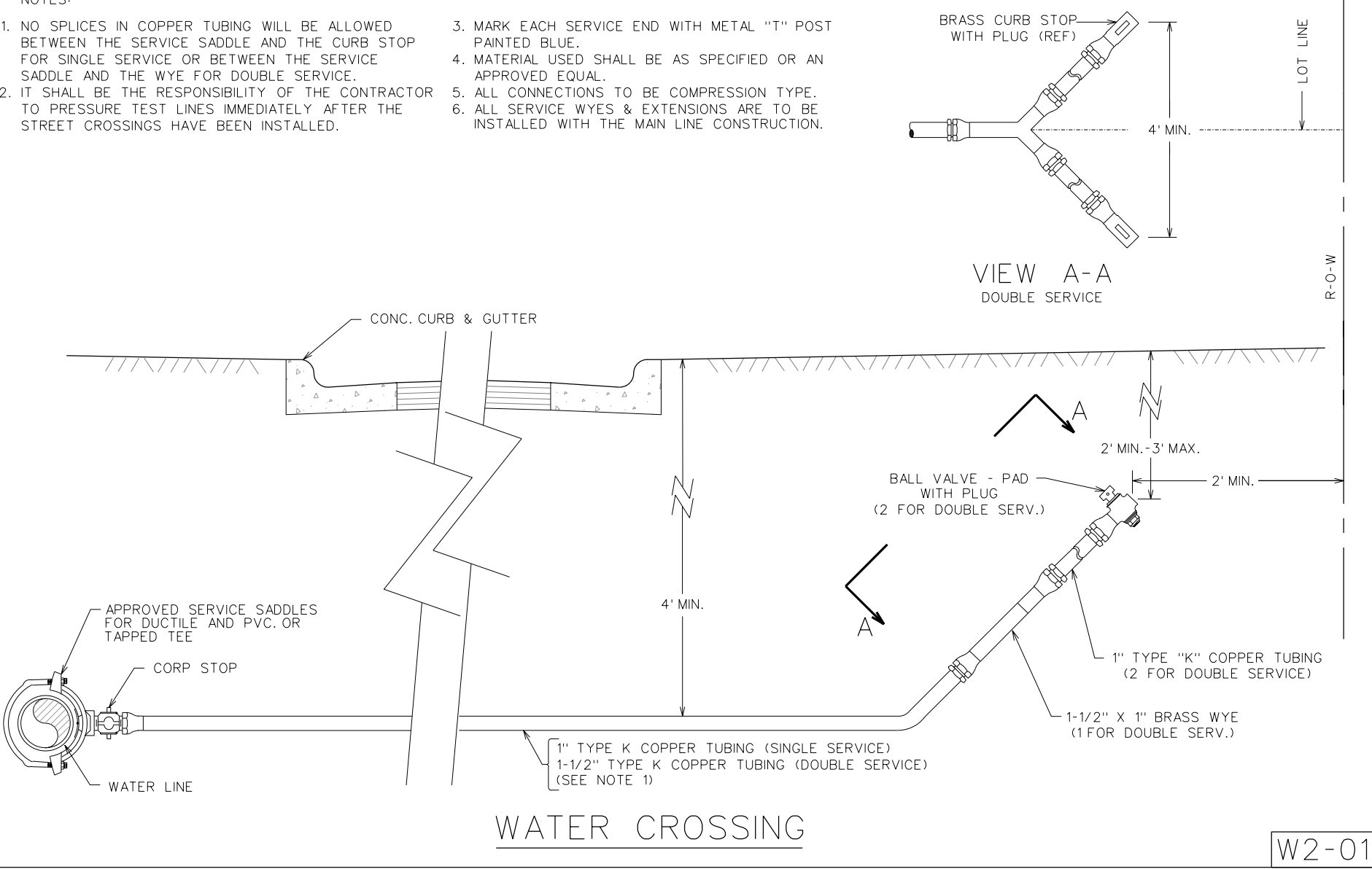


HORIZONTAL THRUST BLOCK SCHEDULE							
BEND	SIZE	A (ft)	B (ft)	C (ft)	E (ft)	G (ft)	VOLUME (c.y.)
90°	6,8"	5.0	1.5	1.5	0.9	2.7	0.4
	10,12"	6.5	2.5	1.5	1.2	4.0	1.0
45°	6,8"	2.0	2.0	1.5	0.9	1.5	0.2
	10,12"	3.5	2.5	1.5	1.2	2.2	0.5
22.5°	6,8"	1.5	1.5	1.5	0.9	0.8	0.1
	10,12"	2.0	2.5	1.5	1.2	1.1	0.3
11.25°	6,8"	1.0	1.5	1.5	0.9	0.4	0.1
	10,12"	1.5	1.5	1.5	1.2	0.6	0.1

TYPICAL HORIZONTAL  
THRUST BLOCK

W2-00

- NOTES:
1. NO SPLICES IN COPPER TUBING WILL BE ALLOWED BETWEEN THE SERVICE SADDLE AND THE CURB STOP FOR SINGLE SERVICE OR BETWEEN THE SERVICE SADDLE AND THE WYE FOR DOUBLE SERVICE.
  2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESSURE TEST LINES IMMEDIATELY AFTER THE STREET CROSSINGS HAVE BEEN INSTALLED.
  3. MARK EACH SERVICE END WITH METAL "T" POST PAINTED BLUE.
  4. MATERIAL USED SHALL BE AS SPECIFIED OR AN APPROVED EQUAL.
  5. ALL CONNECTIONS TO BE COMPRESSION TYPE.
  6. ALL SERVICE WYES & EXTENSIONS ARE TO BE INSTALLED WITH THE MAIN LINE CONSTRUCTION.

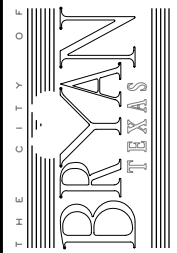


WATER CROSSING

W2-01

REVISIONS:			
REVISED 12-16-03	REVISED 1-14-04	REVISED 1-28-04	

BRYAN - COLLEGE STATION  
STANDARD WATER DETAILS



DRAWN BY: A  
DATE: 04-07-03  
SCALE: N.T.S.  
APPROVED: W.P.K.

FIGURE:  
W2  
SHEET 2 OF 4